

WHAT IS CLAIMED IS:

1. A braking force control system of a vehicle,
comprising:

a lateral acceleration detecting unit detecting a lateral
5 acceleration of the vehicle; and

a braking control unit carrying out an anti-lock braking
control and carrying out an independent braking control of right
and left rear wheels,

wherein, in a case that said lateral acceleration exceeds
10 a lateral acceleration value set beforehand, when said anti-lock
braking control is operated at one of the right and left rear
wheels, said braking control unit executes a stepwise pressure
increase control for providing a stepwise pressure increase
for the other rear wheel up to a braking pressure to be reached
15 at a start of the control.

2. A braking force control system of a vehicle,
comprising:

a lateral acceleration detecting unit detecting a lateral
20 acceleration of the vehicle; and

a braking control unit carrying out an anti-lock braking
control and carrying out an independent braking control of right
and left rear wheels,

wherein said braking control unit executes a braking force
25 distribution control between front and rear wheels as specified

when said lateral acceleration exceeds a lateral acceleration value set beforehand, and said braking control unit stops said front and rear braking force distribution control of either one of rear wheels and executes a stepwise pressure increase control thereof when said anti-lock braking control is operated at the other rear wheel, said stepwise pressure increase control providing a stepwise pressure increase up to a braking pressure to be reached at a start of the control.

3. The braking force control system of a vehicle as claimed in claim 2, wherein said front and rear braking force distribution control is started and executed depending on a slipping condition of the rear wheel.

4. The braking force control system of a vehicle as claimed in claim 2, wherein said front and rear braking force distribution control is executed by selecting one of a select low control controlling braking forces of wheels in accordance with a wheel on the side with a large slipping state, and an independent braking control independently controlling the braking forces of the wheels depending on the slipping state thereof in accordance with the lateral acceleration, a longitudinal acceleration and a vehicle speed.

5. A braking force control method of a vehicle having

a braking control unit carrying out an anti-lock braking control and carrying out an independent braking control of right and left rear wheels, said method comprising the steps of:

detecting a lateral acceleration of the vehicle; and

5 executing, when said anti-lock braking control is operated at one of the right and left rear wheels, a stepwise pressure increase control for providing a stepwise pressure increase for the other rear wheel up to a braking pressure to be reached at a start of the control, in a case that said lateral
10 acceleration exceeds a lateral acceleration value set beforehand.

6. A braking force control method of a vehicle having a braking control unit carrying out an anti-lock braking control
15 and carrying out an independent braking control of right and left rear wheels, said method comprising the steps of:

detecting a lateral acceleration of the vehicle; and

executing a braking force distribution control between front and rear wheels as specified when said lateral acceleration
20 exceeds a lateral acceleration value set beforehand; and

executing, when said anti-lock braking control is operated at one of the right and left rear wheels, a stepwise pressure increase control of the other rear wheel after stopping said front and rear braking force distribution control thereof,
25 said stepwise pressure increase control providing a stepwise

pressure increase up to a braking pressure to be reached at a start of the control.

7. The braking force control method of a vehicle as
5 claimed in claim 6, wherein said front and rear braking force distribution control is started and executed depending on a slipping condition of the rear wheel.

8. The braking force control method of a vehicle as
10 claimed in claim 6, wherein said front and rear braking force distribution control is executed by selecting one of a select low control controlling braking forces of wheels in accordance with a wheel on the side with a large slipping state, and an independent braking control independently controlling the
15 braking forces of the wheels depending on the slipping state thereof in accordance with the lateral acceleration, a longitudinal acceleration and a vehicle speed.